WISCONSIN DIVISION OF PUBLIC HEALTH
Department of Health and Family Services

Clostridium difficile

Associated diseases (Pseudomembrancolitis, Antibiotic associated diarrhea)

Disease Fact Sheet Series

What is *Clostridium difficile*?

C. difficile is a spore forming bacteria which can be part of the normal intestinal flora in as many as 50% of children under age two, and less frequently in individuals over two years of age. *C. difficile* is the major cause of pseudomembranous colitis and antibiotic associated diarrhea.

What are the risk factors for *C. difficile* associated disease?

C. difficile associated disease occurs when normal intestinal bacteria is altered, allowing *C. difficile* to flourish in the intestinal tract and produce a toxin that causes a watery diarrhea. Repeated enemas, prolonged nasogastric tube insertion and gastrointestinal tract surgery increase a person's risk of developing the disease. The overuse of antibiotics, especially penicillin (ampicillin), clindamycin and cephalosporins may also alter normal intestinal bacteria that will increase the risk of developing *C. difficile* diarrhea.

What are the symptoms of *C. difficile* associated disease?

Mild cases of *C. difficile* disease are characterized by frequent, foul smelling, watery stools. More severe symptoms, indicative of pseudomembranous colitis, include diarrhea that contains blood and mucous, and abdominal cramps. An abnormal heart beat may also occur.

How is *C. difficile* associated disease diagnosed?

C. difficile diarrhea is confirmed by the presence of a toxin in a stool specimen. A positive culture for *C. difficile* without a toxin assay is not sufficient to make the diagnosis of *C. difficile* associated disease.

What is the treatment for *C. difficile* associated disease?

As soon as *C. difficile* disease is diagnosed, current antibiotic therapy should be reassessed by the physician. Patients with severe toxicity or unresolved diarrhea may need to have their antibiotic treatment modified to use drugs not known to result in *C. difficile* diarrhea. Patients should be monitored for dehydration and electrolyte imbalance following prolonged periods of diarrhea. Antidiarrheal agents such as Lomotil® or Imodium® have been shown to increase the severity of symptoms and should ***NOT*** be taken.

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PPH 42039 06/01

How can *C. difficile* associated disease be spread?

Individuals with *C. difficile* associated disease shed spores in the stool that can be spread from person to person. Spores can survive up to 70 days in the environment and can be transported on the hands of health care personnel who have direct contact with infected patients or with environmental surfaces (floors, bedpans, toilets etc.) contaminated with *C. difficile.*

How can *C. difficile* associated disease be prevented?

Strict adherence to hand washing techniques and the proper handling of contaminated wastes (including diapers) are effective in preventing the spread of the disease. Environmental surfaces contaminated with *C. difficile* spores should be cleaned with an effective disinfectant (bleach). Limiting the use of antibiotics will lower the risk of developing *C. difficile* diarrhea.

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